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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,855	08/14/2001	James L. Todsen	38880.2200	9850

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W. Daniel Swayze III
Texas Instruments Incorporated
7839 Churchill Way, MS 3999
P.O. Box 655474
Dallas, TX 75265

EXAMINER

MAI, TAN V

ART UNIT	PAPER NUMBER
2124	

DATE MAILED: 07/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/929,855	TODSEN ET AL.
	Examiner Tan V Mai	Art Unit 2124

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 25 February 2004.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-29 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-3,13-15,18,19,23,25,26 and 29 is/are rejected.
 7) Claim(s) 4-12,16,17,20-22,24,27 and 28 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/14/01</u> . | 6) <input type="checkbox"/> Other: _____. |

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1. The abstract of the disclosure is objected to because superfluous language is used in this paragraph (i.e., "comprising" and "comprise"). Correction is required. See MPEP § 608.01(b).

2. Claims 2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per dependent claim 2, the terms "to receive and filter a sample of data during the first delay and a sample of data during a delay cycle" (lines 4-5) seem to be misdescriptive they should be --samples--.

As per independent claim 18, the phrase "second digital filter being selected to receive and filter samples of data during a subsequent delay cycle" (lines 8-9) should be --second digital filter being selected to receive and filter samples of data during the initial delay cycle and a subsequent delay cycle-- (see claim 2 and 13).

As per independent claim 25, the term "said composite arrangement" (line 2 from the bottom) lacks antecedent basis.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 13-15, 18-19, 23, 25-26 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over McGrath.

As per independent claim 1, McGrath discloses, e.g., see Figs. 6-12, the invention substantially as claimed, including: **a plurality of parallel filters** which comprise a "**composite filter arrangement**" (e.g., see col.6, lines 37-53). It is noted that McGrath does not specifically detail the claimed (1) "settling rate" and (2) "noise resolution" features; however, McGrath does disclose the equivalent features. First, McGrath discloses "**filter module F1** is a filter with very low latency implemented with time domain techniques whilse all other **filter modules Fi** are implemented with fast convolution techniques ..." (col. 7, lines 34-43). Second, because the filters are implemented by different techniques, the "noice resolution" should be different. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to design the claimed invention according to McGrath's teachings because the device has a plurality of parallel filters which comprise a composite filter arrangement as claimed.

As per dependent claim 2, McGrath discloses the claimed feature, e.g., see Figs. 8-9.

As per dependent claim 3, McGrath discloses M (M greater than 2) plurality of parallel filters.

Due to the similarity of claim 13-15, 18-19, 23, 25-26 and 29 to claims 1-3, they are rejected under a similar rationale.

4. Claims 4-12, 16-17, 20-22, 24 and 27-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cited references are art of interest.

6. The following is an examiner's statement of reasons for allowance: the recorded references do NOT teach or suggest the detail features as recited in dependent claims 4-12, 16-17, 20-22, 24 and 27-28.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan V. Mai whose telephone number is (703) 305-9761. The examiner can normally be reached on Tue-Fri from 6:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki, can be reached on (703) 305-9662. The fax phone numbers for the organization where this application or proceeding is assigned are:

Non-Official/Draft (703) 746-7240.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



TAN V. MAI
PRIMARY EXAMINER